

No. 776,366.

PATENTED NOV. 29, 1904.

S. E. SPENCER.
TIRE INFLATING PUMP.
APPLICATION FILED MAY 2, 1904.

NO MODEL.

Fig 1

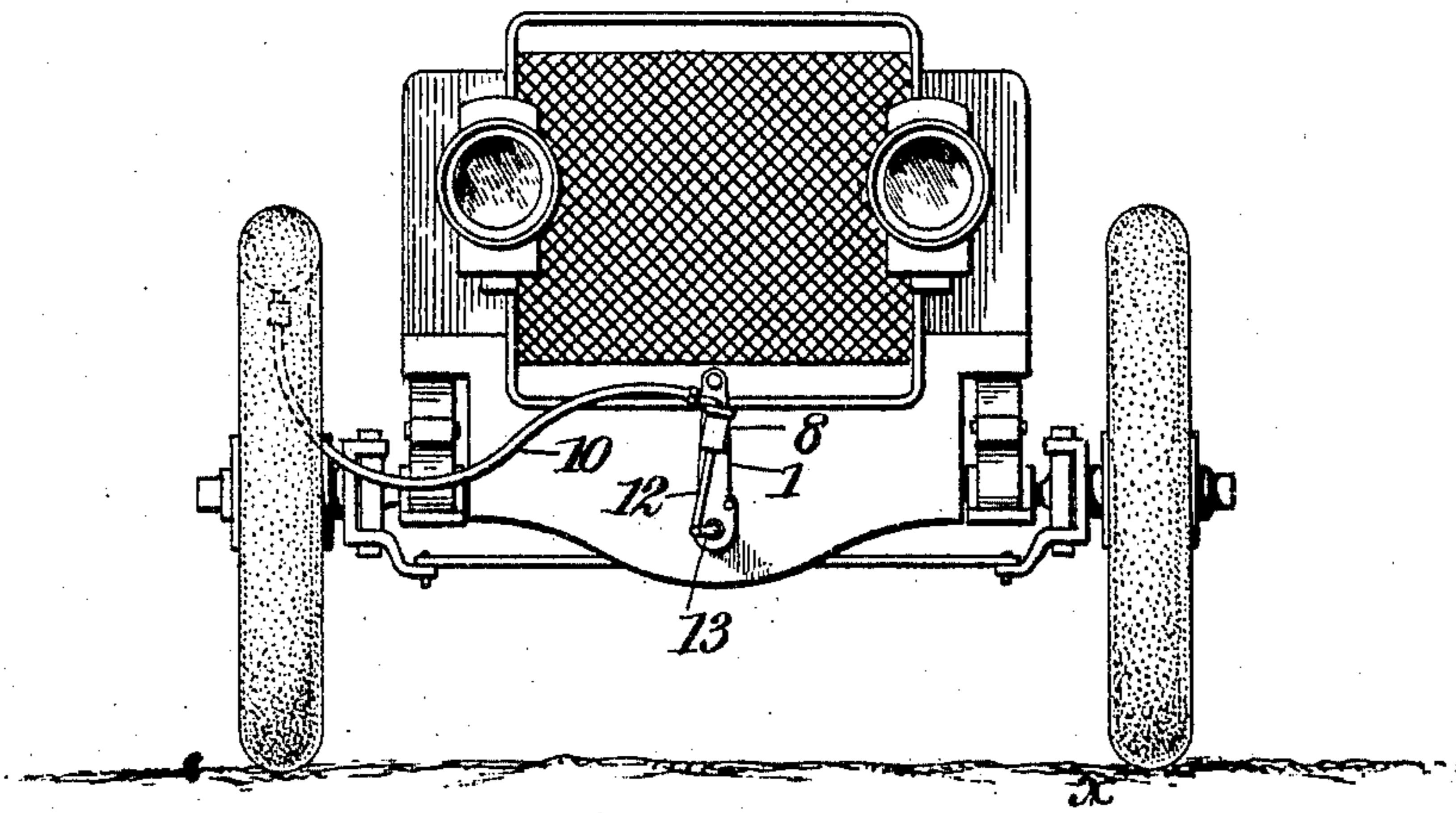
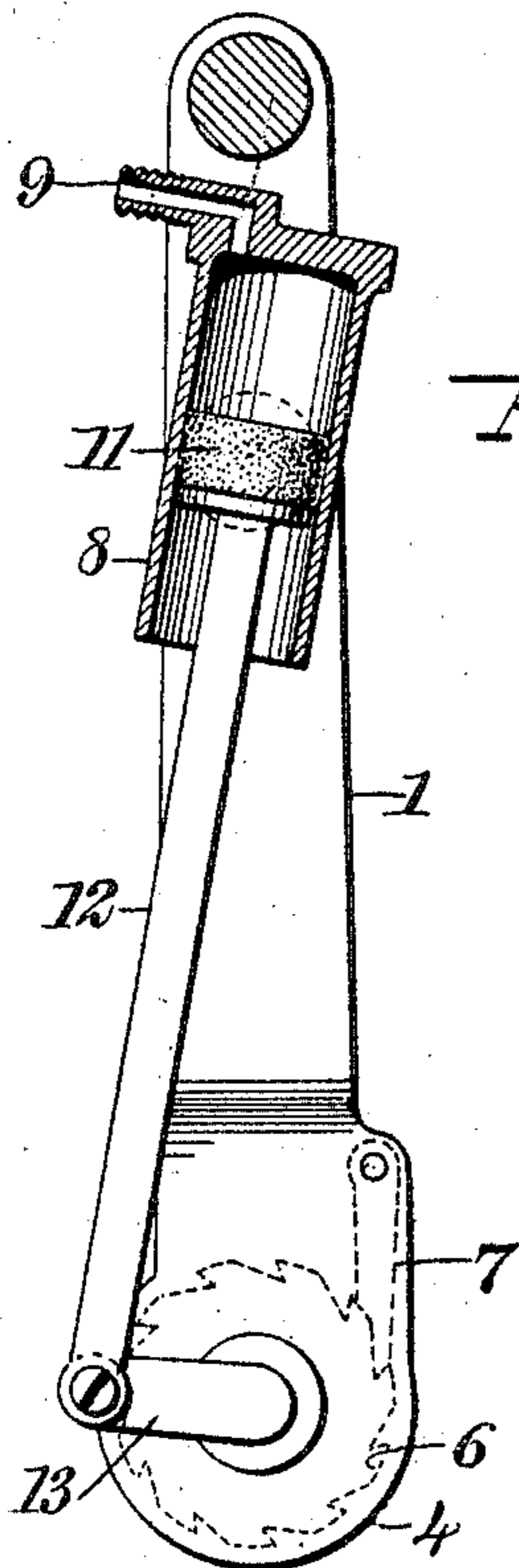


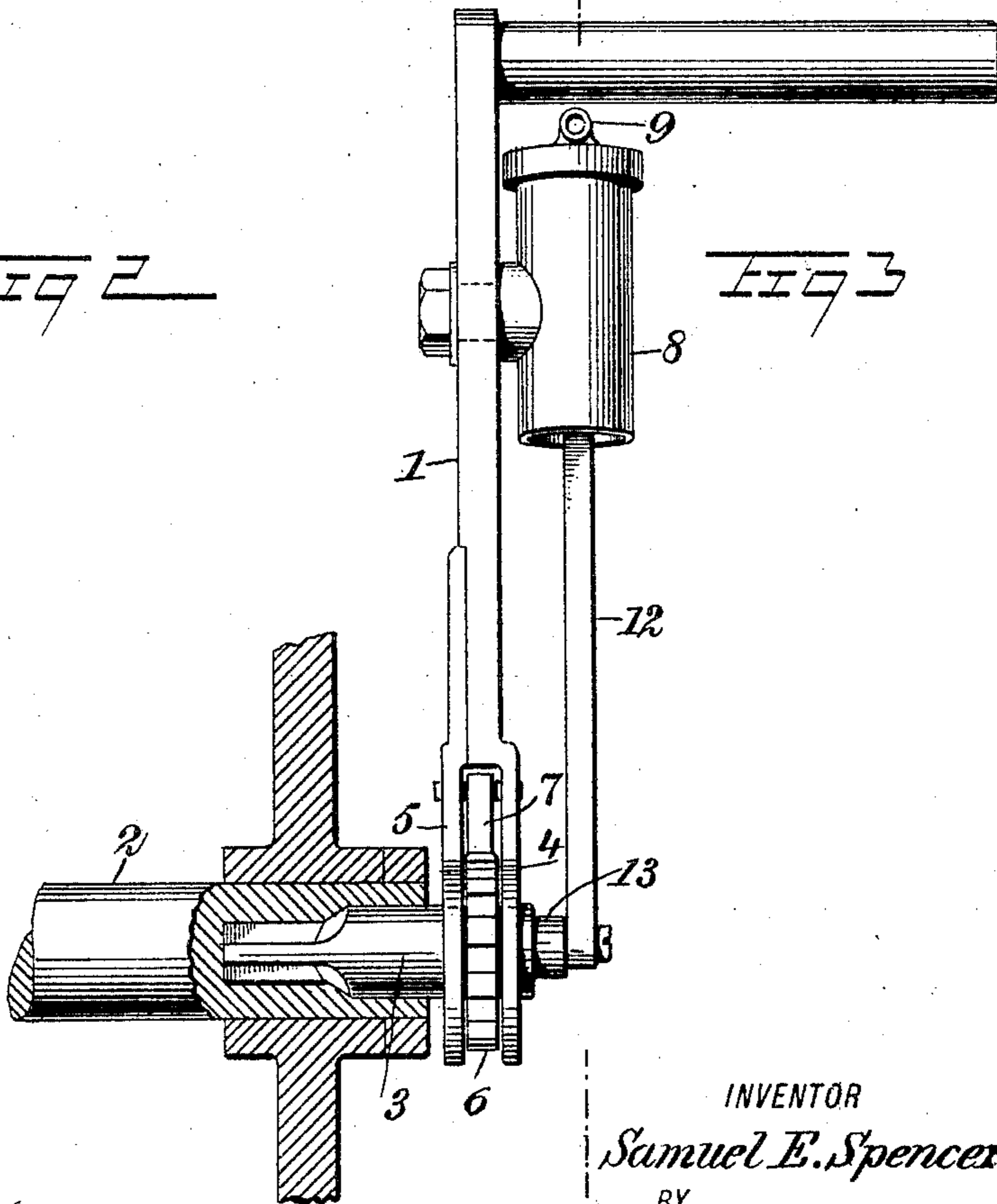
Fig 2



WITNESSES:

H. Walker
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Fig 3



INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

SAMUEL E. SPENCER, OF SPRINGVILLE, NEW YORK, ASSIGNOR OF ONE-HALF TO RALPH B. WAITE, OF SPRINGVILLE, NEW YORK.

TIRE-INFLATING PUMP.

SPECIFICATION forming part of Letters Patent No. 776,366, dated November 29, 1904.

Application filed May 2, 1904. Serial No. 205,936. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL E. SPENCER, a citizen of the United States, and a resident of Springville, in the county of Erie and State of New York, have invented a new and Improved Tire-Inflating Pump, of which the following is a full, clear, and exact description.

This invention relates to improvements in pump mechanism for inflating the tires of motor-vehicles, an object being to provide a pump mechanism that may be detachably connected to the driving-shaft of the motor and operated therefrom to quickly inflate the tires.

I will describe a tire-inflating pump embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of a motor-vehicle with a pump mechanism embodying my invention as connected therewith. Fig. 2 is a sectional view on the line $x-x$ of Fig. 3 of the pump mechanism, and Fig. 3 is a side elevation thereof.

Referring to the drawings, 1 designates a crank usually employed for starting a gasoline or similar motor and is designed to be removably attached to the driving-shaft 2. A crank-pin 3 has bearings in spaced members 4 5 of the crank, and the pin is designed to engage in a longitudinal opening formed in the end of the shaft 2, and the pin has an angular portion for engaging with angular walls of said opening.

Attached to the pin between the members 4 5 is a ratchet-wheel 6, engaged by a pawl 7 to prevent reverse motion of the crank-pin, and also the pawl-and-ratchet mechanism will hold the crank 1 rigidly in connection with the crank-pin 3 when the crank is employed for starting the motor.

Mounted on the body of the crank 1 and having oscillating motion with relation thereto is a pump-cylinder 8, having at its upper end a nipple 9, to which a flexible tube 10 is designed to be attached, the said tube of course

also being arranged to engage with the valve of the tire.

Operating in the cylinder 8 is a bucket-piston 11, the stem 12 of which has pivotal connection with a crank-arm 13 on the crank-pin 3.

In the operation, after starting the motor and of course while it is disengaged from its driving connection with the vehicle the crank 1 is to be held stationary, and then the rotary motion of the shaft 2 will operate the piston in the pump-cylinder.

While I have shown and described the pump as attached to a motor-starting crank, it is to be understood that I do not limit my invention thereto, as I contemplate the use of any form of pump for the purpose specified operated by a rotary part of a gasoline-motor, such as the crank-shaft, while the pump is manually held from rotary motion relatively to said rotary part.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A tire-inflating pump mechanism comprising a starting-crank designed to be removably engaged with the driving-shaft of the motor, a crank-pin mounted to rotate in the crank, a crank-arm on said crank-pin, a pump-cylinder mounted on the first-named crank, and a piston in said cylinder having connection with the crank-arm.

2. In a tire-inflating pump mechanism, a crank, a crank-pin mounted to rotate therein and adapted for detachable connection with the motor driving-shaft, a pump-cylinder having oscillating motion on the crank, a piston in the cylinder, and an operating connection between said piston and the crank-pin.

3. A tire-inflating pump mechanism comprising a crank, a crank-pin mounted to rotate therein and adapted for removable connection with a motor driving-shaft, a ratchet-wheel attached to said crank-pin, a pawl carried by the crank for engaging with the ratchet-wheel, a pump-cylinder mounted to oscillate on the crank, and a piston operated in said cylinder by a connection with the crank-pin.

4. In a motor-vehicle having inflatable tires,
a motor-shaft having a longitudinal opening
at one end, a crank-pin adapted to removably
engage in said opening, a crank having spaced
5 members in which said pin is mounted to ro-
tate, a ratchet-wheel on the pin between said
spaced members, a pawl carried by the crank
and engaging with said wheel, a crank-arm
on the pin, a pump-cylinder mounted to os-
10 cillate on the first-named crank, a piston in
said cylinder and a connection between said
piston and said crank-arm.

5. A motor - vehicle - tire - inflating pump,

and means for operating the pump from a ro-
tary part of the motor while the pump is manu- 15
ally held from rotary motion with relation to
said rotary part, the said pump being detach-
able from said rotary part and from the ve-
hicle.

In testimony whereof I have signed my name 20
to this specification in the presence of two sub-
scribing witnesses.

SAMUEL E. SPENCER.

Witnesses:

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CLAYTON J. ELLIS.